

Foresight technologies in the formation of a sustainable regional development strategy

Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

© 2018 International Strategic Management Association. All Rights Reserved. In the modern regional management system, new principles, methods and tools should be used. The purpose of this paper is to substantiate theoretical and methodological approaches to the application of foresight technologies as a modern tool for optimizing the system of regional management in the formation of a strategy for sustainable development. The paper analyzes the Russian and international experience of foresight formation and identifies the features of foresight introduction at the meso level; a roadmap for the sustainable development of a region, developed based on an analysis of long-term forecast and program regional documents, as well as a SWOT analysis of the socio-ecological and economic system of the Republic of Tatarstan. The study determines the significance of foresight technologies in the context of the formation of sustainable development strategies for regional and municipal administrations. Recommendations on the developed "Roadmap for the Sustainable Development of the Republic of Tatarstan" were studied and used in implementing measures to ensure the sustainable development of the urban economy.

Keywords

Foresight, Foresight technology, Regional administration, Sustainable regional development

References

- [1] Andreeva, N.M., Artyukhov, I.P., Myagkova, E.G., Pak, N.I., Akkasynova, Z.K. 2018. Organizing blended learning for students on the basis of learning roadmaps. *Journal of Social Studies Education Research*, 9(2), 47-64.
- [2] Bootz, J.P. 2010. Strategic foresight and organizational learning: A survey and critical analysis. *Technological Forecasting and Social Change*, 77(9), 1588-1594.
- [3] Clayton, A. 2005. *Technology Road mapping for Developing Countries*. Vienna, UNIDO.
- [4] Ekimova, K., Kolmakov, V., Polyakova, A. 2017. The credit channel of monetary policy transmission: Issues of quantitative measurement. *Economic Annals-XXI*, 166(7-8), 51-55. doi:10.21003/ea.V166-10
- [5] Gaponenko, N.V. 2008. *Foresight: Theory, Methodology, Experience*. Monograph, Moscow, UNITY-DANA.
- [6] Gapsalamov, A.R., Vasilev, V.L., Ilyin, A.G. 2017. State planning of the Russian economy: Past and present. *International Journal of Economic Perspectives*, 11(1), 474-480.
- [7] Georghiou, L., Cassingena, H.J. 2013. Rising to the challenges-reflections on future-oriented technology analysis. *Technological Forecasting and Social Change*, 80(3), 467-470.
- [8] Gibson, E., Daim, T., Garces, E., Dabic, M. 2018. Technology foresight: A bibliometric analysis to identify leading and emerging methods. *Foresight and STI Governance*, 12(1), 6-24.

- [9] Hassan, S., Othman, Z., Sabudin, N.S., Mohaideen, Z.M., Hidthir, M.H. 2018. The economic impact of UUM international students' expenditure on business activities in changlun. *Journal of Social Studies Education Research*, 9(1), 140-157.
- [10] Higgins, J.M. 1994. 101 Creative Problem-Solving Techniques: The Handbook of New Ideas for Business. Florida, New Management Publishing Company, Winter Park.
- [11] Keenan, M., Miles, I. 2008. Scoping and Planning Foresight, in Georghiou I., Cassingera Harper, J., Keenan, M., Miles, I., Popper, R. (eds.). *The Handbook of Technology Foresight*. Cheltenham, Edward Elgar.
- [12] Kolmakov, V.V., Polyakova, A.G., Shalaev, V.S. 2015. An analysis of the impact of venture capital investment on economic growth and innovation: Evidence from the USA and russia. *Economic Annals*, 60(207), 7-37. doi:10.2298/EKA1507007K
- [13] Korableva, O.N., Kalimullina, O.V. 2016. Strategic approach to the optimization of organization based on BSC-SWOT matrix. Paper presented at the 2016 IEEE International Conference on Knowledge Engineering and Applications, ICKEA 2016, 212-215.
- [14] Kovalenko, E.G., Yakimova, Y.O., Avtaykina V.E. and Zaytseva, O.O. 2016. Problems and Mechanisms of Sustainable Development of Rural Areas (at the example of the Republic of Mordovia). *European Research Studies Journal*, 19(3) Part A, 110-122.
- [15] Kurbanova, E., Korableva, O., Kalimullina, O. 2018. Enhancing the effectiveness of asset management through development of license management system on the basis of SCCM 2012 program by microsoft company. Paper presented at the ICEIS 2018 - Proceedings of the 20th International Conference on Enterprise Information Systems, 2, 171-178.
- [16] Ladykova, T.I., Vasilieva, I.A., Zavisha, E.N. 2015. Foresight technologies in forecasting innovative development of the region. *Management of economic systems: electronic scientific journal*, 4(76), 32.
- [17] Martin, B.R. 1993. *Research Foresight and the exploitation of science base*. London, HSMO.
- [18] Martin, B.R. 2002. *Technology Foresight in a Rapidly Globalizing Economy*. International Practice in Technology Foresight. Vienna, UNIDO.
- [19] Miles, I., Keenan, M., Kaivo-Oja, J. 2003. *Handbook of Knowledge Society Foresight*. Dublin, European Foundation for the Improvement of Living and Working Conditions.
- [20] Nagimov, A.R. 2013. Analysis of regional development trends in Republic of Tatarstan. *Proceedings of the International Scientific and Practical Internet Conference "Problems of Forming a New Economy of the 21st Century"*, 17-19.
- [21] Nagimov, A.R. 2017. Features of implementing foresight technologies at the meso level. *Competitiveness in the global world: Economy, science, technology*, 6-5(53), 66-68.
- [22] Seidl da Fonseca, R. 2017. The future of employment: Evaluating the impact of STI foresight exercises. *Foresight and STI Governance*, 11(4), 9-22.
- [23] Sibirskaya, E., Yamykh, E., Eldyaeva, N., Dubrova, T. and Oveshnikova, L. 2016. Strategy of Systemic Development of Entrepreneurial Infrastructure of Regional Economy. *European Research Studies Journal*, 19(2), 239-262.
- [24] Sokolov, A.V. 2007. *Foresight: A look into the future*. Foresight, 1.
- [25] Tarman, B., Chigisheva, O. 2017. Transformation of educational policy, theory and practice in post-soviet social studies education. *Journal of Social Studies Education Research*, 8(2), I-IV.
- [26] UNIDO. 2005. *United Nations Industrial Development Organization Technology Foresight Manual, Organization and Methods, Volume 1*. Vienna, UNIDO.
- [27] Zolotukhina, A.V. 2010. Foresight as a technology for managing the scientific and technical potential of sustainable development of the region. *Problems of modern economy*, 2(34), 344-348.